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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,661	09/30/2003	Jianxin Wang	66329/31254	5005

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EXAMINER
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HANG, VU B

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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07/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,661	<b>Applicant(s)</b> WANG ET AL.	
	<b>Examiner</b> Vu B. Hang	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/30/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

*Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 9-11 and 5-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabbaugh et al. (US Patent 6,814,510 B1) and Nuggehalli (US Patent 7,143,150 B1).
3. Regarding **Claims 1 and 9**, Sabbaugh discloses a method for continuously updating a printer driver associated with a printer configuration (see Fig.2, Col.2, Line 47-60 and Col.6, Line 39-45), comprising retrieving current printer configuration from a registry on a controller (see Col.3, Line 24-37 and Col.4, Line 30-47). Sabbaugh fails to expressly disclose accessing an external file containing at least one offset representative of at least one printer attribute; querying the at least one offset representative; and updating a data structure containing information about initialization and environment of a printer. Sabbaugh, however, teaches accessing print driver configuration data (see Col.4, Line 30-47), detecting for at least one offset representative of a printer attribute (see Col.2, Line 47 – Col.3, Line 12) and using the dynamic link data objects to configure the print driver (see Col.56-65). Sabbaugh teaches the use of bi-directional monitors for automatically updating a print configuration and avoid manually updating a printer configuration, which is prone to errors (see Col.2, Line 22-27). Nuggehalli discloses accessing the print driver configuration update data containing at least one offset representative of at least one printer attribute (see Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 – Col.6, Line 3);

querying the at least one offset representative (see Col.6, Line 57-67); and updating a data structure containing information about initialization and environment of a printer (see Col.3, Line 62 – Col.4, Line 2).

4. Sabbaugh and Nuggehalli are combinable because they are from the same field of endeavor, namely print configuration methods. At the time of the invention, it would have been obvious for one skilled in the art to include to Sabbaugh's printer driver updating method the steps of accessing an external file containing at least one offset representative of at least one printer attribute; querying the at least one offset representative; and updating a data structure containing information about initialization and environment of a printer. The motivation would be to access a configuration file containing the new or updated print options, and updating the print driver with new or updated print options. This print driver update method would enable automatic print driver updating without having to manually reconfigure the print driver when a few print options need to be added.

5. Regarding **Claims 2 and 10**, Sabbaugh further discloses initializing the controller (see Col.6, Line 5-15).

6. Regarding **Claims 3 and 11**, Sabbaugh further discloses copying the print driver configuration update data containing at least one offset representative to the controller (see Col.4, Line 31-40 and Col.6, Line 5-15).

7. Regarding **Claims 13 and 15**, Sabbaugh and Nuggehalli disclose the method as described in Claim 1 but fail to disclose packing the external file on a portable storage medium.

Nuggehalli, however, teaches loading the print driver configuration data from a portable storage medium (see Fig.1 (16) and Col.3, Line 55-58) and using the configuration data stored on the

portable storage medium for controlling the print driver configuration and update process (see Col.9, Line 55-64). At the time of the invention, it would have been obvious for one skilled in the art to package the configuration data on a portable storage medium. The motivation would be to manually to distribute the configuration data to remote computer devices.

8. Regarding **Claims 6-7 and 14-15**, Sabbaugh and Nuggehalli disclose the method as described in Claim 1 but fail to disclose packaging the portable storage medium during a client build or controller build. Sabbaugh, however teaches adding clients and configuring a print driver between the clients and a controller (see Col.4, Line 56 – Col.5, Line 7). Nuggehalli teaches loading the print driver configuration data from a portable storage medium (see Fig.1 (16) and Col.3, Line 55-58) and using the configuration data stored on the portable storage medium for controlling the print driver configuration and update process (see Col.9, Line 55-64). At the time of the invention, it would have been obvious for one skilled in the art to package the configuration data on a portable storage medium during client build or controller build. The motivation would be to store the most recently updated configuration data on the portable storage medium and manually distributing the configuration data to remote computer devices.

9. Regarding **Claims 7 and 15**, Sabbaugh and Nuggehalli disclose the method as described in Claim 1 but fail to disclose packaging the

10. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabbaugh et al. (US Patent 6,814,510 B1) and Nuggehalli (US Patent 7,143,150 B1), and in further view of Gonsho (US Pub. 2004/0051743 A1).

11. Regarding **Claims 4 and 12**, Sabbaugh and Nuggehalli disclose the method as described in Claim 1 but fail to disclose using an extensible markup language file as the external file.

Sabbaugh, however teaches using a graphical user interface for controlling the updating process for the printer driver (see Fig.5 and Col.6, Line 31-38). Gonsho, teaches using an extensible markup language file for defining and displaying the print configuration data for updating a print driver (see Fig.4, Fig.5 and paragraph [0047-0049]).

12. Sabbaugh, Nuggehalli and Gonsho are combinable because they are from the same field of endeavor, namely print configuration methods. At the time of the invention it would have been obvious for one skilled in the art to use an extensible markup language file as the external file. The motivation would be to define the configuration data for updating a print driver when transmitting the data to another device, and using the data to display and control the print driver configuration.

13. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabbaugh et al. (US Patent 6,814,510 B1) and Nuggehalli (US Patent 7,143,150 B1), and in further view of Nishimura (US Pub. 2004/0085563).

14. Regarding **Claims 8 and 16**, Sabbaugh and Nuggehalli disclose the method as described in Claim 1 but fail to disclose updating a private DEVMODE. Nuggehalli, however, teaches updating a data structure containing information about initialization and environment of a printer (see Col.3, Line 62 – Col.4, Line 2). Nishimura teaches the DEVMODE file contains default print driver setting information, including the default print option setting and default configuration data (see Fig.7 and Page 9, paragraph [0122]). Nishimura further teaches updating the DEVMODE file during the print driver configuration or updating process (see Page 9, paragraphs [0122 – 0124]).

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15. Sabbaugh, Nuggehalli and Nishimura are combinable because they are from the same field of endeavor, namely print configuration methods. At the time of the invention it would have been obvious for one skilled in the art to update the private DEVMODE during the print driver update process. The motivation would be to set the default print driver setting with the updated print options and configuration data.

***Claim Rejections - 35 USC § 102***

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims 17-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Nuggehalli (US Patent 7,143,150 B1).

18. Regarding **Claims 17 and 25**, Nuggehalli discloses a method for automatically updating a printer driver associated with a printer configuration (see Fig.5A, Col.2, Line 48-51 and Col.3, Line 1-5), the steps comprising: initiating a first computer program (see Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 and Col.6, Line 4); retrieving printer data for a current printer configuration from a registry (see Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 and Col.6, Line 4); monitoring the current printer configuration for an attribute change (see Col.6, Line 5-11 and Col.6, Line 57-67); and activating a second computer program in response to the attribute change (see Col.6, Line 5-11 and Col.6, Line 57-67).

19. Regarding **Claims 18 and 26**, Nuggehalli further discloses the first computer program resides on a controller communicatively coupled to a printer (see Fig.4 (2), Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 and Col.6, Line 4).

20. Regarding **Claims 19 and 27**, Nuggehalli further discloses monitoring at least one registry key for attribute changes (see Col.6, Line 5-11 and Col.6, Line 57-67); and notifying a caller of a change to the attribute of the at least one registry key (see Col.6, Line 5-11 and Col.6, Line 57-67).

21. Regarding **Claims 20 and 28**, Nuggehalli further discloses resetting the at least one registry key to a non-signaled state (see Col.6, Line 5-11).

22. Regarding **Claims 21 and 29**, Nuggehalli further discloses retrieving a current printer configuration by a communication protocol (see Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 and Col.6, Line 4); writing the current printer configuration to at least one registry key (see Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 and Col.6, Line 4); and updating the printer driver associated with the at least one registry key (see Col.7, Line 63 – Col.8, Line 2).

23. Regarding **Claims 22 and 30**, Nuggehalli further discloses the communications protocol is a simple network management protocol (see Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 and Col.6, Line 4).

24. Regarding **Claims 23 and 31**, Nuggehalli further discloses delaying the simple network management protocol (see Col.8, Line 34-43).

25. Regarding **Claim 24**, Nuggehalli further discloses the second computer program resides on a controller (see Fig.4 (2), Col.3, Line 62 – Col.4, Line 2 and Col.5, Line 65 and Col.6, Line 4).

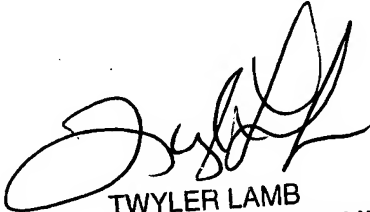


*Conclusion*

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571) 272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.
27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Hang  
Assistant Examiner

*Vu Hang*

  
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SUPERVISORY PATENT EXAMINER